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Perpetuation of Testimony in Patent Suits.

A CASE in equity of considerable interest to patent lawyers, as well as to legal antiquarians, has been decided by Judge Benedict in the United States Circuit Court for the Eastern District. The complainant, it appears, has been infringing a certain patent owned by the defendant, and now files his bill in equity under section 866 of the United States Revised Statutes to have recorded in the court the testimony of a witness upon which the complainant alleges that he relies to show that the patent is void for want of novelty, in case a suit shall be brought against him by the defendant for the infringement. The witness is a very old man, and the complainant further alleges in his bill that the defendant is waiting for the witness to die before bringing his suit, so that the complainant may be deprived of the protection afforded by his testimony. On this ground he prays that the testimony may be recorded in perpetuam rei memoriam. The defendant demurred to the bill, and Judge Benedict, by the decision referred to, has overruled the demurrer. The interest of the case to patent lawyers arises from the fact that, so far as appears from the books, no such suit has ever before been brought in any case involving patent rights, nor, in fact, has any bill for the recording of testimony strictly in perpetuam rei memoriam ever been pleaded under the section of the Revised Statutes referred to. One of the points made upon the argument was that the bill ought to be dismissed because the complainant was able to obtain a full judicial settlement of his rights by inducing the Attorney-General to bring a suit in the name of the United States to annul or repeal the patent. But waiving the question whether such a suit could be brought in the name of the United States, Judge Benedict decides that the complainant has no power to bring such a suit, nor is it such a remedy as to deprive the complainant of his right to institute the present proceeding. Legal antiquarians will also find interest in the decision on account of the antiquated character of the procedure. In England at the present time, and generally in the United States, the subject of the perpetuation of testimony is regulated by special statutes giving a summary course of procedure for that purpose. The ancient practice of obtaining the same end by bill in equity survives only within the production of a few of the older States and of the Federal courts,

which still follow in these matters the English practice of the time of Lord Eldon. A curious feature of the practice is the taking of the testimony in perpetuam rei memoriam immediately after the cause is at issue, without waiting for the complainant to establish his right to do so by proof, an anomaly which Prof. Langdell in his summary of equity pleading thinks arose from confounding the testimony to be perpetuated with the testimony to establish the right to perpetuate it. If this explanation is correct, it furnishes a striking instance of the way in which the force of reason is sometimes overridden in law by the power of long-established usage. Richards & Heald, and Henry P. Starbuck, appeared for the complainant, and Goodrich, Deady & Platt, for the defendant.

The Barings.

THE Barings have been among the most famous of English bankers. They are of German stock. There is a kind of ecclesiastical flavor about them. Their English founder was a Bremen Pastor, who settled in this country. His grandson married the niece of an English Archbishop. One of his descendants became Bishop of Durham. The money was originally made in the rich, profitable clothing business in the West of England. Going into the old-fashioned church of the pleasant Devonshire town of Ashburton one day, we were greatly interested by the Baring monuments. Ashburton gave a title in the peerage to the chief of the house of Baring. It has been a rule in the house that when any one of them has got a title he goes out of the business. Sir Francis Baring, the first great banker, who, dying in 1810, left a fortune of two millions, had three sons—Thomas, Alexander, and Henry. Thomas succeeding to the baronetcy, gave up the business. Henry had rather a romantic reputation as a lucky gambler, who was frequently able to break the bank of a gambling-table. He was the amazement of beholders, when he would sit down at a gambling-table at the Palais Royal—before such tables were happily abolished—with piles of gold and notes before him. The reputation of a successful gambler was hardly suited to the intense respectability of the firm, and Mr. Henry was induced to retire from the business. Alexander Baring, often known as "Alexander the Great," sustained and extended the fortunes of the house. He went to America, there the richest banker in England, married the daughter of the richest

citizen of the United States. One of his gigantic transactions possesses a historical importance. After the conclusion of the great European war he paid down a sum of £1,100,000, by which France was freed from the occupation of Russian, Austrian and German armies. "There are six great powers in Europe," said the Duc de Richelieu—"England, France, Russia, Austria, Prussia, and Baring Brothers." In 1835 he was made Lord Ashburton. Two of his sons held the title, and each successively retired from the business. The head of the firm, Thomas Baring, became Chancellor of the Exchequer in Lord Melbourne's Ministry, and another member, Lord Northbrook, has been Governor-General of India.—*London Society*.

The Cable Railway.

No improvement has ever been made in the city of Chicago which has been regarded with as much interest as the cable railway which has been in course of construction on the South-side by the South-side Street Railway company during the last six months. Its near completion only adds to this interest, and it is asserted that the value of property along the line of the road and at the southern terminus has increased in proportion to the progress of the work. The construction of this new mode of transportation is the work entirely of the South-side company, the president, Mr. Holmes, having visited and studied the system thoroughly in San Francisco, upon which he made his report to the directory, that ordered him to adopt and perfect it at once. It has caused some bad feelings during the temporary abandonment of State street by the company, but now that the work is almost done and the people begin to understand the great expense involved and the blessings to come therefrom, they are beginning to take pride in it and long for its active operation. There are nine miles of road constructed in the most approved plan, steel rails having been used. This is an improvement over all other cable roads. The expense attached to building the road has been about \$2,000,000. The department of machinery and all of the mechanical appliances are acknowledged to be the best in the world, and in very many respects are decided improvements on other systems. One of the special features that has been especially commended is the large winders and sheaves; these are considered very important factors and are for the purpose of preventing crystallization of the

rope. The very best material has been used in the construction of the cables. An interesting study is the gripping device, which is claimed to be another improvement over any other cable system adopted heretofore. Special plans have been taken to prevent its wearing on the rope. The importance of this will be better understood by the public when the road will be in active operation. The grip-cars which have been constructed by the company are very artistic in their appearance. Forty-two of these have been built by the company. To these the ordinary street cars are attached. Some inquiry has been made as to the mode by which these cars will be stopped. Mr. Holmes says that by means of a very ingenious device which controls and manipulates the tension wheels no difficulty will be experienced in the stoppages, or trouble anticipated from the severity of the weather. In case snow or ice should obstruct the cable chain, such obstruction will be easily removed by means of a steam pipe heated for that purpose. The working of the machinery, it is claimed, creates no unpleasant noise to the ear. The starting or stopping will be milder than in the present system, all of the sudden checks or jerkings being avoided. The motion will be easy and uniform. In respect to rapid transit it will be a revolution in city travel, and a ride in one of the coaches over the bed road will become a luxury instead of a dread, as on the old system. The South-side company claims to be the first city railway in the world to adopt steel rails and the 21-foot car. The company announce that the cars are to be run with a special view to the comfort of the public. They propose that not only shall Chicago enjoy the system, but that it shall be run upon a principal which will reflect upon the city from abroad. The system has already created great interest abroad, the result being that capitalists from Eastern cities have already come to Chicago to see its workings. Mr. Holmes is very much opposed to the proposed change in the name of State street, inasmuch as he has that name ground in the class of all his cars. In regard to the date upon which the system will go into operation Mr. Holmes is not certain, but says it will be in the very near future.—*Chicago Times*.

Strength of Wooden Columns.

AN extended account of his experiments at the Watertown Arsenal to test the strength of wooden columns was recently given before a meeting of the Society of Arts at Boston, Mass., by Prof. Lanza. The main results deduced were that wooden bolsters or caps at the top of the columns are a source of weakness, as was proved in an experiment where the bolster was crushed with a pressure of 20,000 pounds, while the column did not yield until 375,000 pounds were brought upon it; that the estimates of strength based upon formulas contained in the books are untrustworthy, as was proved when a column which by the formula should have withstood 8,000 pounds gave way at 4,000 pounds; that allowance must be made on account of eccentric pressure, that is, weight brought by the timbers of a heavily loaded floor upon one side of a column, not counter-

acted by corresponding weight upon the contiguous timbers of an unladen floor; that pintles are a source of weakness if not set square and true, whereby a rocking pressure may be brought upon the column; that the deflection or springing of a column is unimportant compared with weakness arising from a knot or crooked grain, and that the text books on mechanics need to be amended by having a new set of tables compiled from data obtained from experiments on full-sized timber, such as is used in building.

Mineral Wool.

ONE of the most striking illustrations of the possibilities of invention in turning waste substances into important articles of utility is seen in the conversion of the slag of iron smelting furnaces into mineral wool. Up to within a few years this slag was considered as a worthless incumbrance that was constantly increasing about the iron works premises, excepting as it was carted off to be used for roads, where it was only after a long amount of travel that it could be so ground up by the passage of horses and vehicles as to be considered desirable as a road bed. A few years ago however a process was discovered by which this waste was destined to be turned into an article of great practical value in numerous and widely varying directions. It was discovered that the slag while in a molten condition if penetrated forcibly by a jet of steam or compressed air, went through a most curious transformation, a result of which was the production of a fibrous article resembling wool in appearance. After considerable experimenting a process of manufacture was devised and patented, by which in a very simple manner the slag was changed into a product called mineral wool and in such perfection as to be ready for use immediately.

The experiments and improvements of the past few years have resulted in the process of manufacture as carried on now at Stanhope, N. J., which in brief is as follows: While the slag is still in a fluid state, it is allowed to fall in a small stream, from a suitable vessel, upon a jet of steam or compressed air, the effect of which is to disintegrate the molten slag, which cools as it is carried forward in the form of wool, resembling sheep's wool and cotton. The instantaneous separation causes a thread or fibre to be pulled out, which varies in length, thickness and color, according to the fluidity and composition of the slag. When gathered up, the fibres appear to lie in all possible directions with relation to each other, in consequence of which there is no parallelism or common direction to the threads, so that the air spaces are angular in shape and microscopic in size. The wool is collected in a large chamber, where it settles in a bulky state, having a fleecy appearance. About eighty per cent of the product has to be riddled, forming the ordinary grade, while the balance is separated by currents of air, and forms the extra grade.

The uses to which mineral wool has been successfully applied as a non-conductor of heat and a non-transmitter of sound are almost innumerable while new uses for it are constantly being discovered by mechanics, builders and scientists. The underlying principle of the application and utility of mineral wool is the one long established in physics, that air-confining or porous bodies are the poorest conductors, and that the passage of heat is retarded in proportion to the volume of air the insulating material holds from circulation. It is used on houses by applying a thickness of about two inches to the roof, to prevent the passage of the sun's heat in summer

and the escape of warm air from the house in winter; it is used in ice houses, about steam-pipes, in hotels, in car building and kindred purposes to a great extent and in the construction of fire proof rooms, it being absolutely fire proof and durable in contact with heated surfaces on account of its having no organic matter in its composition. The Health Commissioners of this city, at their conference with the master plumbers last November strongly recommended as a sanitary precaution that boilers, ranges hot and cold water supply pipes in exposed places be packed with mineral wool and properly cased in. An idea of the cheapness of the wool is seen in the fact that the cost of a filling two inches thick for 100 square feet of surface (416 lbs.) is only \$4.16 for the ordinary grade at the works. About 3,000,000 pounds of this useful and economical article are now in use, and the United States Mineral Wool Co. at their office 16 Courtland St., have many valuable references as to the satisfactory results attending its extended adoption.

English Locomotives in America.

ENGLISH engineers will be somewhat surprised to learn that the order has been obtained in the country for a considerable number of American locomotives for railways in America. They are now being built from the designs and instructions of Mr. James Cleminson, M.I.C.E., Westminster, by a leading North of England firm, and are on the true American type, as represented in Baldwin's America, Mogul, and consolidation classes, though some slight modifications are made in the arrangement of the compensating beams. The system of compensation is carried out completely, so that the wheels must bear with full weight on any road, just as the speculum of a large telescope is supported on Lord Rosse's or Grubb's system of connected levers. It is expected that the engines will show what can really be done by locomotives on the American type built on the best English methods and workmanship, and we shall probably learn how much truth there is in the oft repeated statement that American locomotives will haul a greater load, weight for weight, and cylinder for cylinder, than those of the English type.—*London Engineer*, Dec. 10.

A Wild Texas Charter.

CHARTERS for private corporations or profit can be had by simply preparing and filing them after paying the fee fixed by law in the State Department. It is reported that a charter for a narrow-gauge railway to every point in Texas has been recently filed. It calls to mind a story told by Swift of a country parson in England who was given to the use of very strong language for one of his cloth. His clerk, who was allowed to use his own discretion in the selection of the hymn with which the services were opened, had already on several successive Sundays commenced with the one beginning: "All people that on earth do dwell." When he read it out again on another Sunday the parson was heard in a suppressed voice to exclaim: "— all people that on earth do dwell!" which, says Swift, was the most comprehensive anathema of which he had ever heard.—*Austin (Texas) Siftings*.

THE Syndicate have undertaken the construction of the Vancouver Island Railway.

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**RAILROAD COMMISSIONERS AND
RAILROADS IN CONNECTICUT.**

IN few States has the utility of a well constituted Board of Railroad Commissioners been better illustrated, or the duties of these officers more satisfactorily performed, both in the estimation of the railroad managers, the people and those outside of that State, who have been interested in suggestions arising there, and in measures adopted after their examination and recommendation, than in Connecticut. Being one of the first States to establish such a commission, Connecticut has been looked to as one of the prominent localities from which should emanate many ideas, tending to improve the relations between the railroads and their employees, and the people, and to be of practical value to railroad managers themselves, in varied details connected with the workings of their roads. The Commissioners of that State, have done a vast amount of work within the past few years, in giving careful hearings and practical tests to theories, complaints and suggestions placed before them, the results of which are conspicuous among the improvements adopted, and conclusions generally accepted in railroad circles. And this work, while persistently prosecuted, has been accomplished in such a manner as not to create the disturbance and unpleasant relations, which unfortunately have been witnessed in other localities between commissioners

and those with whom their duties have brought them in contact.

An important reason which has conducted to this desirable result, is that the people of Connecticut have not deemed it best to confer excessive power upon their Commissioners, in regard to such questions of transportation, as form so large a part of the duties of similar officers in other States; those aiming to enforce measures judicious, or otherwise, for the suppression of alleged opportunities for unjust discrimination and exactation. Connecticut, to be sure, is not a field where complaints about discrimination would be expected in any such extent, as in States where there were special motives for favoring certain localities and parties, where a hot rivalry existed as to the development of certain seaports or markets. Situated between New York and Boston, and having no rival seaport of her own, Connecticut can turn to either of these great markets with about equal facility and avail herself of such advantages as either may choose to offer, prospering with the prosperity of both, and enjoying the effect of their rivalry without serious, local disturbance, or inconvenience to herself.

The ownership of Connecticut railroads is peculiarly local, as is the management, the roads being owned and managed largely by people living in the sections through which they pass. On this account it is possible to lay complaints which arise promptly before the railroad managers themselves, instead of before their representatives, in which way, by personal communication, the cause for complaint can be clearly understood and rectified, and frequently their unreasonableness readily and satisfactorily demonstrated, without the tedious and annoying delays of red tape required when the officers of the road are far removed and not interested in the local affairs along their lines. The manufacturing, commercial and agricultural interests of Connecticut, are peculiarly fortunate in that the roads of their State are so largely under home management and ownership, and the Commissioners thereby are relieved from duties which would interfere with their important work pertaining to other practical matters.

But the success which has attended the work of the Connecticut Railroad Commissioners and the desirable position maintained by them in the estimation of

similar Boards and the general public, while greatly assisted by the conditions mentioned, are largely due to the great pains taken to apply to the practical questions brought before them the most careful consideration and such tests as would be considered reasonable and just by experienced railroad men. They have been better enabled to do this on account of the wisdom which placed upon the Board as one of its active members, a man who has been all his business life a practical railroad man. An illustration of this manner of working, is seen in the course pursued in the matter recently agitated in that State concerning the enactment of a law, requiring railroads to adopt a safety car-coupler. A bill to this effect was last year referred by the Connecticut Legislature to the Commissioners with instructions to report upon the subject this year. Accordingly a public investigation was held at the Commissioners office in November last for two days, after liberal announcements concerning the same, at which a variety of patents were submitted and examined. This investigation was supplemented by further examinations and by personal inquiry of railroad men, in various positions and in different parts of the State. We have briefly referred to some of the causes which resulted so admirably in regard to the relations established by this particular Board of Commissioners between themselves, the people, the railroads and their employees, believing that some of these causes hinted at, might be utilized to advantage in the organization of similar Boards in other localities. As an illustration of an unprejudiced opinion, we conclude by quoting from their recommendation concerning the car-coupling question, which, with the addition of the recommendation of some simple and cheap method of improving the couplers of old cars was as follows:—

"We would therefore recommend the enactment of a law requiring that all freight cars hereafter bought or built by the corporations operating railroads in this State, shall be equipped with automatic couplers, the draw-bars of which shall be at the uniform height which has been recommended by the master car-builders, and with dead-blocks sufficiently thick to give not less than one foot clear space between the cars, when the blocks come together, and that similar draw-bars and couplers should be made

use of in all renewals. If it is objected that this is a half way measure, we answer, that is just what it is intended to be. To require our companies to substitute, at once, automatic couplers for those now in use on their more than eight thousand freight cars would, in our judgment, be imposing an unreasonable burden of expense."

GOSHEN SUPERHEATING SAFETY BOILER.

THE Goshen Foundry and Gas Machinery Co., are receiving most satisfactory results from the practical tests which have been given of late, to their Goshen Superheating Safety Boiler, patented last spring. Some of these boilers in actual use, have affected a saving of 20 per cent, and upwards, in fuel over boilers replaced by them. Seven hundred and fifty pounds of coal is considered to be the consumption required for running a 40 horse power engine, averaging from 60 to 70 pounds of steam, for 12 hours with this boiler, which evaporates 15 pounds or more of water, to one pound of coal. Some of the peculiarities and advantages of the boiler are, that each section of 5 horse power is separate and can be removed for repairs without interfering with the other parts of the boiler; that it generates dry steam, is non-explosive and has a remarkably large heating surface, and also a very small grate surface. At the company's office, 37 Dey street, under the charge of Mr. Benj. Hornor, General Agent, can be obtained further information concerning what the valuable improvements possessed by the Goshen boiler have accomplished and illustrated, in the way of economy and durability.

Mica Masks.

A WELL-KNOWN German manufacturer of mica wares, Herr Raphael, of Breslau, now makes mica masks for the face which are quite transparent, very light and affected neither by heat, nor by acids. They afford good protection to all workmen who are liable to be injured by heat, dust or noxious vapors; all workers with fire, metal and glass melters, stonemasons, etc. In all kinds of grinding and polishing work the flying fragments rebound from the arched mica plates of the mask without injuring them. These plates are fixed in a metallic frame, which is well isolated by means of asbestos, so as not to be attacked by heat or acid. These masks allow the turning of the eyes in any direction, and, as against mica spectacles, they afford the advantage of protection to the whole face. In certain cases, the neck and shoulders may also be guarded by a sheet of cloth impregnated with fire-proof material, or by asbestos

sheet, attached to the mask. The interval between the mica and the eyes allows of workmen who have poor eyesight wearing spectacles, and of workers with fire or in melting operations wearing colored glass spectacles under the mask, without fear of breakage of the glass, mica being such a bad conductor of heat. Where the mask has to be worn long it is found desirable to add a caoutchouc tube with mouth-piece for admission of fresh air; the tube passes out to the shoulders, where its funnel-shaped end (sometimes holding a moistened sponge) is supported. The mask has a sort of cap attached to it for fixture on the head.

PERSONAL.

EX-POSTMASTER GENERAL JAMES has assumed the duties of his new position as president of the Lincoln National Bank.

JUSTICE GRAY was sworn in on the 9th inst., and took his seat on the bench of the United States Supreme Court, at Washington.

GEORGE SKINNER has been appointed Superintendent, and Joseph Robinson Treasurer and Assistant Superintendent of the Scioto Valley Railroad.

JAMES D. SMITH, of Stamford, Conn., has been appointed by the Governor, State Treasurer, in the place of David P. Nichols, deceased.

WM. C. EGLESTON, of this city, has been elected a director of the Cleveland and Pittsburgh Railroad Company, in the place of F. T. Walker, deceased.

BENJAMIN F. NEWCOMER has been elected a director of the Philadelphia, Wilmington and Baltimore Railroad Company, in the place of Samuel Harlan.

FRANK M. BARKER has been appointed to engineer the survey of 70 miles of road which is to be built from Corry, Pa., to Buffalo. His headquarters will be at Erie.

ISAAC HINCKLEY has been re-elected president; A. J. Cassatt, vice president, and Robert Craven, treasurer of the Philadelphia Wilmington and Baltimore Railroad Company.

DR. JOHN W. DRAPER, author of "Intellectual Development of Europe," history of "American Civil War," and "Conflict between Science and Religion," died on the 4th inst., aged 71, at his home, Hastings-on-Hudson, N. Y.

JOHN C. GAULT has been appointed second vice president and general traffic manager of the Wabash system, with Robert Andrews, general superintendent; and W. F. Merrill, as his assistant. The ticket and freight departments have been placed under the charge of H. C. Townsend and H. C. Bird respectively.

CHARLES W. CASE has been appointed superintendent of the Hastings and Dakota Division, of the Chicago, Milwaukee and St. Paul Railway, with headquarters at Minneapolis, Minn.; Fred D. Underwood, superintendent of the Southern Minnesota Division, with headquarters at La Crosse, Wis.; Henry R. Wilson, superintendent of the Iowa and Minnesota Division, with headquarters at Minneapolis, Minn.; John Jackson, superintendent of the Sioux City and Dakota Division, with head-

quarters at Sioux City, Iowa. George W. Sanborn continues as superintendent of the Iowa and Dakota Division and branches, with headquarters at Mason City, Iowa. N. Monsarrat has resigned the position of general superintendent of the Chesapeake, Ohio and Southern Railroad, to become general superintendent of the Cleveland, Akron and Columbus Railroad.

JOHN G. MOTLEY has been appointed superintendent of the Southern Division of the Mobile and Ohio Railroad.

ENGINEER John M. Unglaub who had charge of the engine of the train on the Baltimore and Potomac Railroad, conveying ex-President and Mrs. Hayes, and family from Washington, on the 5th of March, 1881, which was run into by an extra train going South, and who stood so manfully at his post, reversing the engine as soon as he saw the extra, has recovered from the injury sustained by him at that time, and resumed his place on the road. On the 2d of January, he was waited upon by a personal friend of the late President, who handed him a fine gold watch and chain, valued at \$700, accompanied by a letter from Mr. and Mrs. Hayes, asking him to accept it as a token of their gratitude and memento of his coolness exhibited on that occasion. The watch was made to order in Philadelphia, and on the outer case there is a monogram, "J. M. U.," and on the inside of the case is a suitable inscription, but Mr. Unglaub, having been charged not to allow it to get into the papers, the exact inscription cannot be procured.

ORGANIZATION.

THE Wilmington, Wrightsville and Jacksonville Railroad Company was organized in Wilmington, N. C., on the 29th ult. with Joseph T. Foy president. Books of subscription are to be opened along the line of the proposed road.

THE John P. King Manufacturing Company was organized at Augusta, Ga., on the 28th ult. with a capital of \$1,000,000. Charles Estes is president and C. C. Baldwin, of New York, and O. H. Sampson, of Boston, are among the directors.

THE directors of the Milford and Bay Shore Railroad Company, elected on the 5th inst., are A. J. Cassatt, John P. Green, William A. Patton, John W. Hall, Isaac Jump, George V. Massey, Bradford Murphy, and Josiah Bacon. The officers are: President, Manlove Hayes; secretary and treasurer, Wm. T. Smithers.

THE Brooklyn and Long Island Railway Company, who propose to build a railroad from the Blackwell's Island Bridge through Long Island City and Brooklyn, have elected the following directors: Richard G. Phelps, Ludwig Semler, James R. Allaben, J. Corbin, E. H. Cole, F. T. Parson, David H. Fowler, Nathaniel Biggs, W. F. Bruff, E. O. Phelps, Alexander Dugan, E. S. Keller and M. C. Earl.

THE directors of the Erie and Huron Railway Company, elected on the 29th ult. are: Hon. Arch. McKellar, J. B. Bain, Alex. Trerice, Dresden; L. H. Stevens, Chatham; F. A. Manning, A. MacNabb, Vernon Smith, Toronto. A meeting of directors was held immediately

afterwards, when Hon. Arch. McKellar was elected president of the Board, Mr. Trerice, vice president; and Mr. MacNabb, secretary.

THE directors of the Baltimore and Delta Narrow Gauge Railway Company, elected on the 5th inst., are: Wm. H. Waters, James P. Streett, C. J. Moore, Stevenson Archer, Eli Tucker, E. S. Rogers, Caleb T. Taylor, S. G. Boyd, Thomas Armstrong, C. W. Hatter, G. O. Wilson, Henry R. McNally and Foulk Jones. The officers are: Wm. H. Waters president; S. G. Boyd, secretary; Thomas Armstrong, treasurer, and C. W. Hatter, auditor.

AT the annual meeting of the stockholders of the Cleveland and Pittsburg Railroad Company, held at Cleveland, O., on the 4th inst., the following directors were elected: J. N. McCullough, B. F. Jones, George B. Roberts, William Bucknell, Frederick Sturges, S. J. Tilden, Charles Lanier, William C. Egleston, E. A. Ferguson, J. V. Painter, James F. Clark and R. P. Ranney. The election of officers rests with the lessees of the road, the Pennsylvania Company.

THE directors of the Dayton and Union (a branch of the Cincinnati, Hamilton and Dayton) Railroad Co., elected on the 4th inst. are: James McDaniel, P. Smith, R. D. Marshall, of Dayton; J. H. Devereux, E. R. Thomas, W. H. Poppleton, Stevenson Burke, of Cleveland; F. H. Short, John Carlisle, of Cincinnati. The officers are F. H. Short, president; Stevenson Burke, vice president; G. H. Russell, secretary and treasurer, E. B. Thomas, general manager; P. A. Hewitt, auditor.

THE directors of the Topeka and Western Railroad Company are: William B. Strong of Boston, O. C. Wheeler of Topeka, G. G. Dexter, J. T. Burr, Alden Speare, C. L. Thorndyke, W. Powell Mason, Elisha Atkins, F. L. Ames, all of Boston; Sidney Dillon of New York, Gov. Veale of Topeka, E. B. Purcell of Manhattan. The capital stock is fixed at \$6,000,000, divided into 60,000 shares. This new road is to start from Topeka, Kansas, thence to the town of Eskridge, in Waubaunsee county, and on through Morris, Dickenson, Saline, Ottawa, Lincoln and Osborne counties. Its length will be 250 miles.

THE directors of the New Haven and Northampton Railroad Company, at their meeting in New Haven on the 4th inst., elected the following Board of Directors: C. N. Yeomans, George J. Brush, Daniel Trowbridge, Horatio G. Knight, William D. Bishop, George H. Watrous, Charles H. Pond, Ezekiel H. Trowbridge and E. M. Reed. The directors subsequently re-elected C. N. Yeomans president and Edward A. Ray secretary. This is the first annual meeting since the New Haven and Hartford Railroad Company purchased a controlling interest in the road. It now has a majority of the directors.

AT a meeting of stockholders of the Terre Haute and Indianapolis and Terre Haute and Logansport Railroad Companies held in Terre Haute, Ind., on the 4th inst., the former elected as directors W. R. McKeen, Geo. E. Farrington, Alexander McGregor, D. W. Minshall, Henry Ross, Josephus Collet and F. C. Crawford. The directors elected W. R. McKeen

president, Geo. E. Farrington Secretary, and J. W. Cruff, treasurer. The latter elected W. R. McKeen, Geo. E. Farrington, J. B. Hager, John B. Williams and D. W. Minshall, directors, who elected W. R. McKeen president, and Geo. E. Farrington secretary and treasurer.

THE following is the organization of the New York and New England Railroad Company for the year 1882: directors, Jesse Metcalf, Providence; Legrand B. Cannon, Sidney Dillon, Cyrus W. Field, Jay Gould, R. Suydam Grant, Hugh J. Jewett, Russell Sage, New York; Eustis C. Fitz, John H. French, William T. Hart, Henry L. Higginson, James H. Wilson, Boston; Frederick J. Kingsbury, Waterbury, Conn., and George B. Roberts, Philadelphia. Executive Committee, William T. Hart, Legrand B. Cannon, Jonas H. French, Jay Gould and James H. Wilson (ex officio). Finance Committee, R. Suydam Grant, Cyrus W. Field, Henry L. Higginson, James H. Wilson (ex officio). President, James H. Wilson; general manager, Samuel M. Felton; treasurer, George B. Phippen; clerk, W. Perkins.

CONSOLIDATION.

THE Canadian Pacific Railway Syndicate took possession on the 1st inst. of the St. Lawrence and Ottawa Railway. It is understood that no change is to be made in the personnel of the management.

THE Cleveland, Columbus, Cincinnati and Indianapolis, the Wabash, St. Louis and Pacific, the Indiana, Bloomington and Western, the Cincinnati, Indianapolis, St. Louis and Chicago, and the Pennsylvania Company, now operate, by ownership, lease or otherwise, all of the twelve separate lines centering in Indianapolis, which were originally managed by as many different companies.

THE St. Louis, Arkansas and Texas Railway company of Missouri, the St. Louis, Arkansas and Texas Railway company of Arkansas, and the Missouri, Arkansas and Southern Railway company have been consolidated under the name of the St. Louis, Arkansas and Texas Railway company. This road enters Arkansas in Benton county, and is being constructed southward via Fayetteville to the Little Rock and Fort Smith railway.

THE stockholders of the Pittsburg and Western and Red Bank and Youngstown Railroad companies met at Pittsburg, on the 30th ult. and consolidated, under the name of the Pittsburg and Western Railroad company. The Red Bank and Youngstown is to run from Red Bank, Pa., to State line in Lawrence county, and there connect with the Youngstown branch of the Pittsburg and Western road. This route it is claimed will be sixty-five miles shorter than yet projected for transmission of freight from East to West.

ARTICLES of consolidation were filed in the office of the Secretary of State of Illinois on the 6th inst. of the Joliet and Indiana Railway Company and the Laporte and Indiana Railway Company. The new organization is to be known as the Joliet, Indiana and Eastern Railway Company, is to have a capital stock of \$1,000,000, and the directors are to be those of the Laporte and Indiana Railway Company, name-

ly: A. W. Paige, William H. Campbell, C. E. Sergeant, John F. Wilson, C. T. Baxter, A. C. Badger and F. D. Raymond. The present president and secretary of the Laporte and Indiana are to remain officers of the consolidated company.

CONSTRUCTION.

THE grading of the Harrisburg and Potomac Railroad is rapidly approaching Shippensburg. The tracks will be laid by March next.

THE South Mountain Railroad Company has commenced the survey of an extension from Hunter's Run to Gettysburg and other points.

WORK is progressing with rapidity on the second track in the Hoosac Tunnel. Eleven thousand feet have been laid, and the central shaft is nearly reached.

THE Harbor Grace (Newfoundland) Standard says the Railway Company are purchasing in England enough railway material to build, equip and operate 160 miles of railway, including rails, carriages, locomotives, implements, etc.

THE Schuylerville branch of the Boston, Hoosac Tunnel and Western Railroad was opened on the 9th inst., to Saratoga. The tonnage of the Hoosac Tunnel line increased in December 50 per cent and the earnings 25 per cent.

THE Mexican government has granted a concession, with a subsidy of \$8,000 per kilometre, to Count Telefener, the agent of De Castro, for a railroad from Matamoras to Tampeco, on condition that De Castro shall acquire the branch road from Matamoras to Victoria, belonging to the Gould-Degrees concession.

THOS. L. RODGERS, vice-president of the California Southern Railroad Company, has received a concession from the Mexican government for the construction of a railroad and telegraph line from a convenient point of junction with the Sonora Railroad to San Diego. The length of the proposed road will be nearly 400 miles.

THE Bethlehem Times says that track laying has been completed from Belvidere to Danville on the Lehigh and Hudson River Railroad for a distance of thirteen miles, and coal is now being shipped to the latter place. The road is to be pushed forward as rapidly as possible, and in a few weeks will be running to Andover. It is also to be run to Portland and Bangor, in Northampton county.

CONNECTION has been made between the Danville, Oliney and Ohio River Railroad and the Chicago and Eastern Illinois Railroad thus securing entrance to Chicago. The directors decided to extend the road this winter to a connection with the Louisville, New Albany and St. Louis Railroad, and during 1882 to complete the system to the Ohio river at Paducah.

CONTRACTS have been let by the Chicago and Northwestern Railway Company, to Carmichael and O'Rourke for grading, on the Calloope branch to the Vermillion River, to be finished Aug. 1; on the Algoma branch, to be finished to Swan Lake by Aug. 1; to Spirit Lake, by Oct. 1; Tracy, by Nov. 1, and, on the Maple

River branch, to be finished to Sioux City by Sept. 1.

Statement of the Public Debt of the United States, January 1, 1882.

DEBT BEARING INTEREST.		
Amount Outstanding.	Accrued Interest.	
6 per cent loan, 1861-'81, continued at 3 1/4 per cent.	\$101,827,200 00	\$1,781,974 20
6 per cent loan 1863-'81 continued at 3 1/4 per cent	47,855,700 00	837,473 82
5 per cent funded loan of 1881	401,503,900 00	2,342,106 08
4 1/4 per cent funded loan of 1891	250,000,000 00	937,500 00
4 per cent funded loan of 1907	738,772,550 00	7,387,725 50
4 per cent refunding certificates	575,250 00	5,752 50
3 per cent navy pension fund	14,000,000 00	210,000 00

Aggregate of debt bearing interest..... \$1,554,534,600 00 \$13,502,632 19
Interest due and unpaid..... 1,331,845 66

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

Amount Outstanding.	Interest due & unpaid.
4 to 6 per cent. old debt, 1837.	\$57,665 00
5 per cent. Mexican indemnity stock, 1846.....	1,104 91
6 per cent. bonds, 1847.....	1,250 00
6 per cent. bounty land scrip, 1847.....	3,275 00
5 per cent. Texas indemnity bonds, 1850.....	20,000 00
5 per cent. bonds, of 1858.....	8,000 00
5 per cent. bonds, of 1860.....	10,000 00
6 per cent. 5-20 bonds, 1862, called.....	370,700 00
6 per cent. 5-20 bonds, June, 1864, called.....	58,650 00
6 per cent. 5-20 bonds, 1865, called.....	77,050 00
5 per cent. 10-40 bonds, 1864, called.....	490,350 00
6 per cent. Consol. bonds, 1866, called.....	411,300 00
6 per cent. Consol. bonds, 1867, called.....	1,103,850 00
per cent. Consol. bonds, 1868, called.....	315,750 00
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1860.....	142,000 00
per cent. funded loan 1881, called.....	3,558,750 00
Oregon War Debt, March 2, 1881, matured July 1, 1881.....	134,500 00
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881.....	1,107,400 00
6 per cent loan of July 17 and Aug. 5, 1861, matured Dec. 24, 1881, called.....	2,763,300 05
6 per cent. loan of March 3, 1863, matured June 30, 1881.....	326,380 00
1-10 to 1 per cent. Treasury notes, prior to 1846.....	82,525 35
1-10 to 6 per cent. Treasury notes, 1846.....	6,000 00
6 per cent. Treasury notes, 1847.....	950 00
3 to 6 per cent. Treasury notes, 1857.....	1,700 00
6 per cent. Treasury notes, 1861.....	3,000 00
7-10 per cent. 3 years' Treasury notes, 1861.....	16,300 00
5 per cent. 1 year notes, 1863.....	43,225 00
5 per cent. 2 year notes, 1863.....	38,200 00
6 per cent. compound interest notes, 1863-64.....	225,260 00
7-10 per cent. 3 years' Treasury notes, 1864-65.....	140,900 00
6 per cent. certificates of indebtedness, 1862-63.....	4,000 00
4 to 6 per cent. temporary loan, 1864.....	2,960 00
3 per cent. certificates, called.	5,000 00

Aggregated of debt on which interest has ceased since maturity..... \$11,528,265 26 \$714,985 31

DEBT BEARING NO INTEREST.		
Demand notes, 1861-62.....	\$59,920 00	
Legal tender notes, 1862-63.....	346,681,016 00	
Certificates of Deposit.....	9,590,000 00	
Coin certificates, 1863.....	5,188,120 00	
Silver certificates, 1878.....	68,675,230 00	
Uncollected interest.....	7,256 51	
Fractional currency, 1862, 1863 and 1864 \$15,461,860 92		
Less amount estimated as lost or destroyed, set of June, 21, 1879.....	8,375,934 00	

Aggregate of debt bearing no interest..... \$437,270,212 92 \$7,256 51

RECAPITULATION.		
Amount Outstanding.	Interest.	
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3 1/4 per cent.	\$149,682,900 00	
Bonds at 5 per cent., continued at 3 1/4 per cent.	401,503,900 00	
Bonds at 4 1/2 per cent.....	250,000,000 00	
Bonds at 4 per cent.....	738,772,550 00	
Refunding certificates.....	575,250 00	
Navy pension fund, 3 p.c.	14,000,000 00	
		\$1,554,534,600 00 \$14,814,377 85
Debt on which interest has ceased since maturity.	11,528,265 26	714,985 31
Debt bearing no int., viz:		
Old demand and legal-tender notes.....	\$346,740,936 00	
Certificates of deposit.....	9,590,000 00	
Coin & silver certificates.....	73,863,350 00	
Fractional currency.....	7,076,926 92	
		\$437,270,212 92
Unclaimed interest.....		7,256 51
		\$2,008,333,078 18 \$15,536,619 67

Total debt, principal and interest to date, including interest due and unpaid..... \$2,018,869,697 35

AMOUNT IN TREASURY.		
Interest due and unpaid.....	\$1,311,845 66	
Debt on which interest has ceased.....	11,528,265 16	
Interest thereon.....	714,985 31	
Gold and silver certificates.....	73,863,350 00	
U. S. notes held for redemption of certificates of deposit.....	9,590,000 00	
Cash balance available January 1, 1882.	156,369,534 53	
		\$253,377,980 76
Debt, less am't in Treas'y Jan. 1, 1882.....	\$1,765,491,717 09	
Debt, less am't in Treasury Dec. 1, 1881.....	1,778,285,340 65	
Decrease of debt during the month.....	\$12 793,623 56	
Decrease of debt since June 30, 1881.....	\$75,107,094 89	
		BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.
		Accrued
	Amount	Interest
	Outstanding.	not paid.
Central Pacific bonds, 1862-64 \$25,885,120 00	\$776,553 60	
Kansas Pacific bonds, 1862-64	6,303,000 00	189,090 00
Union Pacific bonds, 1862-64	27,236,512 00	817,095 36
Cent. Branch Union Pacific bonds, 1862-64.....	1,600,000 00	48,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	59,116 80
Sioux City & Pacific bonds, 1862-64.....	1,628,320 00	48,849 60
		Totals..... \$64,623,512 00 \$1,938,705 34
		Interest paid by the United States, \$51,467,272 02; interest repaid by transportation of mails, &c., \$14,707,886 34; interest repaid by cash payments: 5 per cent. net earnings, \$655,198 87; balance of interest paid by United States, \$36,104,186 81.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, December 31, 1881.

CHARLES J. FOLGER,
Secretary of the Treasury.

The Coal Trade.

THE leading coal carrying companies make the following reports of their tonnage for the week ending December 31, and for the year to same date, compared with their respective amounts carried to the same time last year:

Week.	1881.	1880.
Reading Railroad.....	135,993	760,344
Schuylkill Canal.....		518,281
Lehigh Valley.....	100,602	570,772
Delaware, Lackawanna and Western.....	79,037	4,359,990
Shamokin.....	22,241	1,088,917
Central R. R. of New Jersey.....	95,680	4,478,443
United R. R. of New Jersey.....	33,904	1,625,882
Pennsylvania Coal.....	21,699	1,427,747
Delaware and Hudson Canal.....	74,574	3,656,385
Huntingdon and Broad Top Mountain.....	9,402	618,420
Penn. and New York.....	25,365	134,898
Clearfield, Pa.....	37,818	2,401,987
		1,739,872

The total tonnage of anthracite coal from all the regions for the week ending Dec. 31, as reported by the several carrying companies, amounted to 495,354 tons, against 343,183 tons in the corresponding week last year, an increase of 152,171 tons. The total amount of anthracite mined for the year is 29,361,021 tons, against

24,274,724 tons for the same period last year, an increase of 5,086,297 tons.

The quantity of bituminous coal sent to market for the week amounted to 75,118 tons, against 67,916 tons, in the corresponding week of last year, an increase of 7,201 tons.

The total tonnage of all kinds of coal for the week is 570,472 tons, against 411,100 tons in corresponding week last year, an increase of 159,372 tons, and the total tonnage for the coal year is 34,355,082 tons, against 26,646,054 tons to same date last year, an increase of 5,709,038 tons.

The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending December 24 was 200,723 tons, of which 145,610 tons were coal and 55,113 tons coke.

The total tonnage for the year thus far has been 9,017,167 tons, of which 6,651,276 tons were coal and 2,365,891 tons coke. These figures embrace all the coal and coke carried over the road east and west. The shipments of bituminous coal from the mines of the Cumberland coal region during the week ended December 31 were 33,378 tons, and for the year 1881, 2,231,453 tons, an increase of 148,750 tons over 1880.

The coal was brought from the mines as follows: Cumberland and Pennsylvania Railroad—week, 27,220 tons; year, 1,930,648 tons; decrease as compared with 1880, 85,886 tons.

George's Creek and Cumberland Railroad—week, 4,131 tons; year, 211,955 tons; increase over 1880, 211,955 tons.

Baltimore and Ohio Railroad—week, 1,365 tons; year, 77,516 tons; increase over 1880, 11,424 tons.

West Virginia Central and Pittsburg Railway—week, 1,020 tons; year, 11,257 tons; increase over 1880, 11,257 tons.

It was carried to tide-water as follows: Baltimore and Ohio Railroad increased compared with 1880, 177,318 tons; road—week, 28,141 tons; year, 1,443,755 tons.

Chesapeake and Ohio Canal—week, 25 tons; year, 505,365 tons; decrease compared with 1880, 96,169 tons.

Pennsylvania Railroad—week, 5,435 tons; year, 278,598 tons; increase compared with 1880, 63,866 tons.

Nearly one-third of the whole shipments of the region were mined by the Consolidation Company—739,414 tons.

Only seven shippers sent out over 100,000 tons, the New Central shipping 301,000 tons, and the George's Creek and Iron 255,000 tons, the others sending out less than 200,000 tons.

—Phil. Ledger, Jan. 9.

INCORPORATION.

A CHARTER was granted on the 5th inst. in Pennsylvania to the American Combined Iron and Steel Company, of Philadelphia, with a capital of \$2,000,000. The company had been formerly chartered under the laws of New York.

THE papers of organization of the Central Pacific Railroad Company, of Wyoming, has been filed with the Secretary of Wyoming Territory by Charles Crocker, Charles F. Crocker and W. V. Huntington, incorporators and trustees. Capital stock, \$13,500,000, in 135,000 shares.

THE Mattoon and Northern Railway Com-

Secretary of State of Illinois. It is proposed by the company, has filed articles of incorporation with the to construct a road from Mattoon to some point on the Illinois Midland Railroad. The principal office is to be at Mattoon. The capital stock is \$30,000, and the incorporators and first Board of Directors are Ira James, C. M. Doyle, J. G. Wright, Thomas M. Lytle and A. M. Ritter, all of Mattoon.

THE St. Augustine Construction Company has been incorporated under the general laws of New Jersey, with a cash capital of \$50,000, and has an office at Red Bank, Monmouth county. The incorporators are W. J. Lawton, of Jacksonville, Fla.; A. M. Lyon, of New York, and G. V. Sneden, of Red Bank. The object of the company is to engage in building and equipping railroads and steamboats and buying and improving lands in Florida.

THE Secretary of State of Illinois, on the 7th inst., licensed John E. Cowles, of New York City; John S. Wompoon, W. R. Jouette and Nelson C. Gridley, of Chicago; and Benjamin F. Wompoon, of Aledo, Ill., to organize the Rock Island and Southwestern Railway Company, with the principal office in Chicago. The capital of the company is \$1,000,000. The company proposes to build about 35 miles of railway and telegraph lines from Rock Island, Ill., to New Boston, Mercer County, Ill.

ARTICLES of incorporation were filed on the 6th inst., with the Secretary of State of Illinois, by the Freeport and Northwestern Railroad Company, which is to have a capital stock of \$36,000. This company proposes to construct a line from Chicago to Fox River and across through Kane County to Freeport, a distance of 145 miles. The principal office is to be at Freeport, and the incorporators and first Board of Directors are John F. Smith, Henry J. Porter, Alonzo V. Richards, M. H. Wilcoxon and Warren C. Clark, all of Freeport.

THE charter of the Topeka and Western Railway Company was filed with the Secretary of State of Kansas, on the 4th inst. The new road is to start from Topeka, thence to the town of Esridge, in Wabaunsee County, and on through Morris, Dickinson, Saline, Ottawa, Lincoln and Osborne counties. Its length will be 250 miles. The directors are William H. Strong, of Boston; C. C. Wheeler, Topeka; Alden Speare, J. T. Burr, F. G. Dexter, S. L. Thorndike, W. Powell, Sidney Dillon, J. T. Dillon of New York; G. W. Veale, of Topeka, and E. B. Purcell, of Manhattan. The capital stock is fixed at \$6,000,000, divided in 60,000 shares.

A CHARTER was issued by the Secretary of State of West Virginia, on the 3d inst., to the Kanawha and Chesapeake Railroad Company. The capital stock is \$3,000,000. The incorporators are H. C. Parsons, H. D. Whitcomb and S. McG. Fisher, of Richmond, Va.; S. A. Miller, of Charleston, W. Va.; and Joseph S. Miller, of Wheeling. The route of the road is as follows: Commencing at or near Cannelton, in the county of Kanawha, and running by the most practicable route, to a point at or near the mouth of the South Branch of the Potomac river, in the county of Hampshire, with the right to build a branch line to a point on the

Potomac river, in the county of Mineral. Principal office, Charleston, W. Va.

ARTICLES of incorporation of the Cincinnati and St. Louis Air-Line Railroad Company were filed on the 26th ult., in the office of the Secretary of State of Illinois. The route of the proposed railroad is from East St. Louis to the Wabash river, at Palestine, or near that point, and running through the counties of St. Clair, Madison, Clinton, Rond, Marion, Fayette, Clay, Effingham, Jasper and Crawford; also a branch from the city of Effingham, Northwesterly, through Effingham and Clay counties to a junction with the Toledo, Burlington and St. Louis Railroad, at or near Holliday, in Shelby county. The principal office of the company is to be at Robinson, Crawford county. The capital stock is \$2,800,000, and the incorporators and Board

of Directors are John S. Cooper, Eric Winters, George Bass, William E. Loan and William W. Garley.

Illinois Central Railroad.

DURING the month of December, 1881, the traffic on the lines operated by this company was (estimated):

In Illinois.....	\$595,190 00
In Iowa (leased lines).....	169,964 00

Total.....	\$709,154 00
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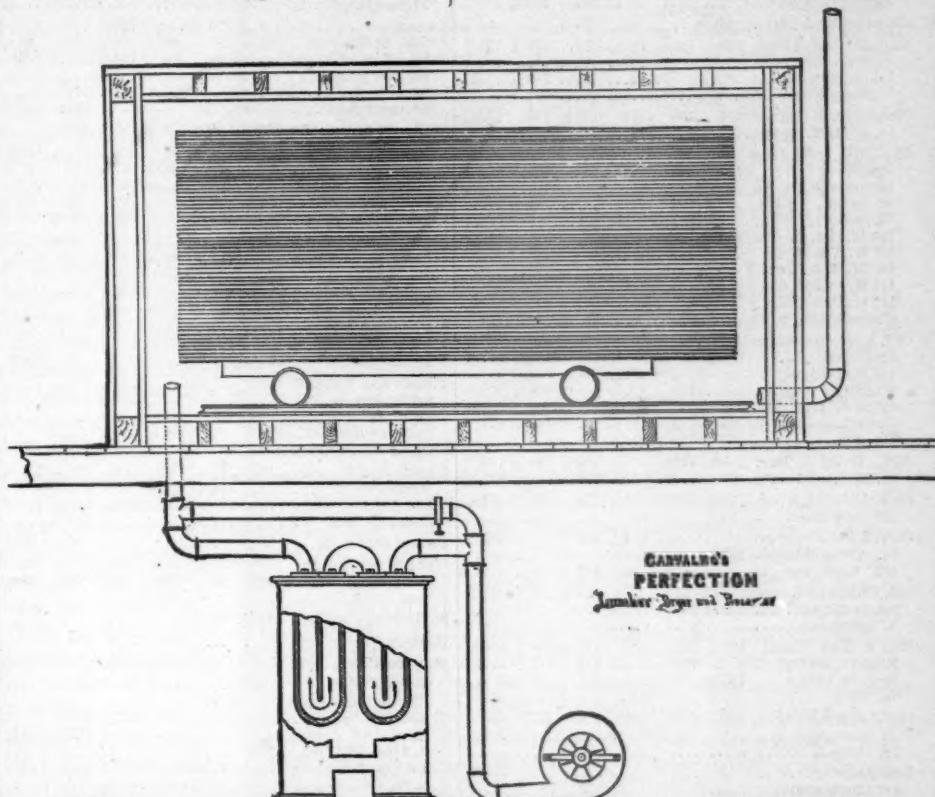
The traffic for the same month in 1880, on the same mileage, was (actual):

In Illinois.....	\$522,565 31
In Iowa (leased lines).....	150,016 33

Total.....	\$673,181 64
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During December, 1881, the land sales were 1,384.22 acres for \$8,185.32, and the cash collected on land contracts was \$9,244.98.

L. A. CATLIN, Secretary.



A Triumph in Scientific Progress.

WHEN we take a retrospective glance at the primitive efforts of our forefathers to subvert the forces of Nature to the necessities of man and contrast their now almost absolute methods with the more modern and scientific substitutions, viz: steam, gas, electricity, &c., we cannot but exclaim that man has "progressed continually" and now occupies a prominent place on the plane of civilization and enlightenment.

We are led to these remarks, by having recently witnessed the practical operations upon a very large scale of an improved apparatus invented by Professor S. N. Carvalho for heating air and superheating steam. His process not only heats atmospheric air to any temperature from 100 degrees to 800 degrees but regulates the temperature and quantity as desired. 500 to 10,000 cubic feet per minute may be transferred to great distances and utilized for drying lumber, grain, bricks, boiling sugar,

soap, beer, baking bread, &c., and heating warehouses and large buildings economically, practically and without danger. The introduction of this novel way to utilize hot air, superseding in many instances the expensive use of steam, is a public benefaction, and we respectfully call the attention of our readers, especially those interested in car building, drying grain and lumber, to a careful examination of its merits.

The apparatus is simple in the extreme and consists of sets of double cylinders placed vertically in a furnace, as per "Patent office drawing" annexed. They rest on an iron plate which also sets on a buck or iron furnace. The apparatus, as seen in operation at the establishment of Wilson & Adams, on 1st Avenue, this city, dried perfectly without checking 3500 thousand feet of lumber just from the mile in 35 hours at the nominal expense of about twenty cents per thousand feet for fuel.

Professor Carvalho's office is at No. 120 Liberty Street, New York.

New York Stock Exchange.

(Thursday's quotations follow money article.)

Closing Prices for the week ending Jan. 11.

Th.5. F.6. Sat.7. M.9. Tu.10. W.11.

Adams Express.....	145	117½	149	149
Albany and Susq.	130	130		
1st mortgage.....				
2d mortgage.....				
American Express.	93	92½	93½	93
1st mortgage guar.....	96½	95½	95½	95½
Central of N. Jersey	90	90	91½	91½
1st mort. 1890.....	118½		118½	119
7s, consol. ass.....			114	114
7s, convertible ass.....		123½		
7s, Income.....	103		101½	102
Adjustment.....	105		107	107½
Central Pacific.....	91½	91½	92½	92½
6s, gold.....	113%		113½	113½
1st M. (San Joaq)	109			
1st M. (Cal. & Or.)	103½			104
Land grant 6s.....	107	105½	106	
Chesapeake & Ohio.	25	24½	26	25½
Chicago and Alton.	129	129%	130½	130½
Preferred.....				
1st mortgage.....			119½	
Sinking Fund.....				
Chi., Bur. & Quincy 134	135	135	135½	136
7s, Consol. 1903.....		127½		125%
Chi., Mill. & St. Paul 106½	107	108	109½	109½
Preferred.....	121	120	121	121½
1st mortgage, 8s.....				
2d mort. 7-10s.....	120		121	
7s, gold.....				
1st M. (La. C. div)	115½			
1st M. I. & M. div.....				
1st M. (L. & D. ext)	114			
1st M. (H. & D. div)	114	114	113½	114
1st M. (C. & M. div)				
Consolidated S. F.		118½		119
Chi., & Northwester 124½	124½	125	126½	126
Preferred.....	137½	136½	138½	138
1st mortgage.....			139%	
Sinking Fund 6s.....	109		109½	110
Consolidated 7s.....				
Consol. Gold bo'ds 123	123		123½	124
Do. reg.	123			
Chi., R. I. & Pac. 131½	131½		132½	133
6s, 1917, c.....	125		126	125½
Clev., Col., Cin. & Ind. 78½	79½	80%	79	80
1st mortgage.....				
Clev. & Pittsburg gr.		133	134	
7s, Consolidated 135½		112	112	
4th mortgage.....				
Col. Chi., & Ind. Cent. 20½	21	21½	21½	21½
1st mortgage.....				
2d mortgage.....				
Del. & Hud. Canal. 107½	107	107	106½	106½
Reg. 7s, 1891.....	112		112	112
Reg. 7s, 1894.....	105			
7s, 1894.....				
Del. Lack. Western 128½	124½	124½	124	124
2d mortgage 7s.....				
7s, Consol. 1907.....				
Erie Railway.....				
1st mortgage.....				
2d mort. 5s, ext.				
3d mortgage.....		105%		
4th mort. 5s, ext.				
5th mortgage.....	113		112	
7s, Consol. gold 129%		129%	129%	
Great West. 1st mort.				108½
2d mortgage.....	104½		104	103½
Hannibal & St. Jo.	95	95½	95	95½
Preferred.....	108	107½	108½	111½
8s, Convertible.....	108		111%	111%
Houston & Tex. Cen.	86			
1st mortgage.....	111	110		111½
Illinois Central.	128½	129½	129½	130
LakeShore & Mich. So. 110½	111	111%	112½	113%
Consol. 7s, reg.				130
2d Consolidated.....		124½		
Leh. & W. B. 7s, Con.				
Long Dock bonds.....				
Louisville & Nash. 95½	97	98	97%	97½
7s, Consolidated 121		100%		121%
Manhattan.....	51	49½	51	51
Met. Elevated.....	85½	87½	88½	89
1st mortgage.....	100	99%	100	100
Michigan Central.	84½	85%	85%	86%
7s, 1902.....	123%		124	
M. S. & N. I. 1st, S. F. 107½				
Morris & Essex.	122		121½	121%
1st mortgage.....				
2d mortgage.....		116		
7s of 1871.....	122½	123½	123½	
7s, Convertible.....				
7s, Consol.ated.....		124		
N.Y. Can. & Hud. R. 129½	129½	129½	130%	131½
6s, S. F. 1883.....		103%		102½

6s, S. F., 1887.....		110		110
1st mortgage.....			134%	
1st mortgage, reg. 133.....			132½	133
N. Y. Elevated.	106½	105½	106	105½
1st mortgage.....	115½	116½	116½	117
N. Y. & Harlem.				
Preferred.....				
1st mortgage.....				
1st mortgage, reg.				
N. Y., Lake Erie & W.	39½	39%	39%	40%
Preferred.....	79	80	81½	81½
2d Consolidated.....	97½	97%	98%	98%
New 2d 6s fund.....	95		95%	94%
N.Y., N.Hav'n & Hart.		170%	172	170%
North Mo. 1st mort.				
Northern Pacific.	35½	35%	36%	36
Preferred.....	73½	74%	75%	74%
Ohio & Mississippi.	35½	35	36½	36
Preferred.....				
2d mortgage.....			120½	
Consolidated 7s.			116	
Consol. S. Fund.			116½	
Pacific Mail S. S. Co. 40	41½	41½	41%	41½
Pacific R. R. of Mo.				
1st mortgage.....				
2d mortgage.....				
Panama.	195		195	
Phila. & Reading.	64½	66	66½	66½
Pitts., Ft. W. & Chl. gtd.		134	134½	134
1st mortgage.....				
2d mortgage.....				
3d mortgage.....				
Pullman Palace Car 125	134½	133%	135	134
Quickail'r Min'g Co.		12		12½
Preferred.....	57		57%	58
St. Louis & San Fran. 40	40	40		40
Preferred.....	58½	57		58½
1st Preferred.	104½	104	104½	105½
St. L., Alt'n & T. H.			42	
Preferred.....		88½	90%	
1st mortgage.....				
2d mort. pref.		107		
Income bonds.....				
St. L., Iron Mt. & S.			117	
1st mortgage.....				
2d mortgage.....	109½			108½
Toledo and Wabash.				
1st mortgage.....		110		
2d mortgage.....				
7s, Consolidated.	104½		104½	104½
St. Louis Division.	107½			
Union Pacific.	115½	116	116½	117
1st mortgage.		114½		
Land Grant 7s.	113		113½	113½
Sinking Fund 8s.			123½	
United States Ex.	76½			76½
Wabash, St. L. & Pac. 35½	36½	36½	36½	36
Preferred.....	66%	67%	68%	68%
New mort. 7s.		114½		
Wells-Fargo Ex.	130%	128		
Western Pacific b'ds.			110	
Western Union Tel. 7s.	78½	78½	78½	77%
7s, S.F. conv. 1900.				
FEDERAL STOCKS:—				
U. S. 4s, 1907, reg.			117½	117½
U. S. 4s, 1907, coup.			117½	117½
U. S. 4½s, 1891, reg. 114½				
U. S. 4½s, 1891, coup.				
U. S. 5s, 1881, reg.				
U. S. 6s, cont'd at 3½ 102½	102½	102½	102½	102½
U. S. 6s, cont'd at 3½ 103½ 100%	100%	100%	100%	100%
Dt. of Col. 3-6s, reg.			107	
Dt. of Col. 3-6s, coup.			107	107
North Pennsylvania 60	60	60		60
1st mortgage 6s.			105	
2d mortgage 7s.				104½
Genl. mtg. 7s, coup.				120
Genl. mtg. 7s, reg.				121
Northern Central.	49½			48½
5s.		97½	97½	
Northern Pacific.	36	35½	36	36½
Preferred.....	75%	73½	74%	75%
Pennsylvania R. R. 60%	60%	60%	61%	60%
1st mortgage.				61
Gen'l mort.				117
Gen'l mort. reg.				117
Consol. mort. 6s.				117
Consol. mort. reg.				117
Pa. State 6s 2d series.				115%
do 3d series.				115%
do 5s, new.				115%
do 3s.				115%
Phila. & Reading.	33½	32½	32%	33%
1st mortgage 6s.				
7s, new 1893.				
7s, new convert.				70
Consol. mort. 7s.				125
Consol. mort. reg.				125
Gen'l mort. 6s.	98½	97½	97%	98
Philadelphia & Erie.				20
1st mortgage 5s.	105½			105
2d mortgage 7s.				105
Pittsb., Cin. & St. L. 7s.		121		122
Pitts., Titusv. & Buff. 21	20½	20%	20%	20%
7s.	102		102	
7s, 1892.		89		89
Schuykill Navi'tn.			6	
Preferred.....	13	13		
6s, 1872.				
6s, 1882.		89		89
United Co. of N. J.	185			
Hentonville, (Horse) 18½				
Chestonville & Wal.(do).				
Green & Coates (do).				

Baltimore Stock Exchange.

Closing Prices for the Week Ending Jan. 10.

W. 4. Th. 5. F. 6. Sat. 7. M. 9. Tu. 10.

Baltimore & Ohio..	195	195	195	195	195	195
6s, 1880.....						
6s, 1885.....						
Central Ohio (\$50).....						
1st mortgage.....	108½	109	109	109	109	109
Marietta & Cincin'ti.....						
1st mortgage, 7s.....			125½	125½	125½	125½
2d mortgage, 7s.....	104½	105	105½	105½	105½	105½
3d mortgage, 8s.....	59½	60	61	61½	61½	61½
Northern Con. (\$50) 50.....						
2d mort., 6s 1885.....	105	105	105	105	105	105
3d mort., 6s, 1900.....						
6s, 1900, gold.....	113	113½	113½	113½	113½	113½
6s, 1904, gold.....	111½					
Orange & Alex. 1st.....						
2d mortgage, 6s.....						
3d mortgage, 8s.....						
4th mortgage, 8s.....						
O., Alex. & Manas's 7s.....						
Pitts. & Connells'v. 7s 121½.....						121½
Virginia 6s, Consol. 69½ 67 65.....	65	64	63½	63½	63½	63½
Consol. coupons.....	73	72½	74	73½	73½	68
10-40 bonds.....	41	40½	40	38½	38½	38½
Def'd Certificates. 16½.....		17½	17½	17½	17½	17½
Western Maryland. 15.....			15	15	15	15
1st M., end. by Balt.....			15	15	15	15
2d M., do.....						
3d M., do.....						
1st M., unendors'd.....						
2d M., end. WashCo.....						
2d M., preferred.....			105			
City Passenger R.R.						

London Stock Exchange.

Closing Prices.

Dec. 10. Dec. 23.

Baltimore & Ohio (sterling).....	114	116	114	116
Cairo & Vincennes com. stock 42.....	42	45	36	40
Do. preferred 5 per cent.....	91	93	90	92
Central of N. J. \$100 share.....	93	98	93	98
Do. Cons. Mortgage.....	116	118	115	117
Do. Adjustment Bonds.....	104	109	104	109
Do. Income Bonds.....	104	107	104	107
Det. G'd Haven & Mil. Equip bds 12.....	114	112	114	114
Do. Con. M. 5p.c., till '83 at '6p.c. 110.....	112	110	112	112
Illinois Central \$100 shares.....	137	138	132½	133½
Lehigh Valley Cons. mortgage.....	115	119	115	119
Louisville & Nashville mort. 6s. 105.....	107	105	107	107
Do. Sink. Fund bds (S.&N. Ala) 104.....	106	103	105	105
Do. Capital stock \$100 shares 108.....	110	102	104	104
N. Y. Cent. & Hud. R. mt. bds. 136.....	139	134	137	137
Do. \$100 shares.....	140	141	136½	137½
Do. mort. bonds (stg.).....	123	125	123	125
N. Y., Lake Erie & West. \$100 shs 46.....	46½	42½	43½	43½
Do. 6 p. c. pref. \$100 shares.....	94	96	91	93
Do. 1st Con. Mort. bds (Erie).....	130	132	130	132
Do. do. Funded Coupon bds. 127.....	129	127	129	129
Do. 2d Consol. Mort. bonds.....	103	104	101	103
Do. do. Funded Coupon bds. 100.....	102	97	100	100
Do. Gold Income bonds.....	95	100	95	100
N. Y., Pa. & Ohio 1st mort. bonds 50%.....	51½	45½	46½	46½
Do. Prior Lien bds (sterling).....	105	105	110	110
Pennsylvania, \$50 shares.....	64½	65½	62½	63½
Do. Con. Sink Fund Mort.	120	122	118	122
Philadelphia & Reading \$50 shs 35.....	36	33½	34½	34½
General Consol Mortgage.....	116	116	118	118
Do. Improvement Mortgage.....	104	106	103	105
Do. Gen. Mtg. '74, ex-def'd coup. 100.....	102	99	100	100
Do. Scrip for the 6 def. ½ coup. 95.....	100	95	100	100
Pittsb., Ft. W. & Chi. Eq. bds.....	105	109	105	109
St. L. Bridge 1st mort. gold b'd. 126.....	128	126	128	128
Do. 1st pref. stock.....	102	104	102	104
Union Pa. Land Grant 1st. mtg. 115.....	119	115	119	119

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, Jan. 12, 1882.

THE quotation for call loans during the day was 4@5 per cent, and at the close it was 4 per cent.

The actual rates for prime bankers' sterling were 4.81½@4.82 and 4.85½@4.85½, with cable transfers 4.86½@4½, and prime commercial bills 4.80@4½. The actual rates for continental bills are as follows: francs, 5.19½@5.20 and 5.24½@5.25; marks, 94½@3-16 and 95@95½; and guilders, 39½@40½.

The receipts of the United States Government for the six months ending December 31, 1881, were: from customs, \$108,358,919; from Internal Revenue, \$76,230,128; from miscellaneous, \$20,566,976—total, \$205,156,023. The

expenditures during the same time were: Ordinary, \$96,615,570; interest on debt, \$38,305,374—total, \$134,920,944. For the six months ending December 31, 1880, the receipts were: from customs, \$98,636,184; from Internal Revenue, \$67,192,225; miscellaneous, \$13,755,175—total, \$179,583,584. The expenditures during the same time were: Ordinary, \$97,798,665; interest on debt, \$41,820,175—total, \$139,618,840. It will be seen that the receipts of 1881 show an increase over those of 1880, of \$25,572,439, and the expenditures a decrease of \$4,697,896; and that the surplus for the six months ending December 31, 1881, was \$70,235,079, against \$39,964,744 for the corresponding six months of 1880, an increase in favor of the period first named \$30,270,385. The reduction on the interest account will be much larger during the coming six months, for the reason that there has been a large reduction in the principal of the public debt, and for the additional reason that on all the continued five and six per cent bonds the rate of interest to be paid will be 3½ per cent. During the past six months on a portion of these bonds the higher rate of interest was paid. The large amount of surplus revenue shown by the figures given above will have considerable influence with Congress when the question of reducing taxation comes to be considered.

The Pennsylvania Sinking Fund Commissioners have accepted bids for \$9,000,000 of the new State loan, at 3, 3½ and 4 per cent, of which Drexel & Co. of Philadelphia get about \$6,000,000. By this transaction, when completed, the interest-bearing State debt will be reduced \$1,482,000.

At a meeting of the trustees of the East River Bridge, held on the 9th inst., the financial statement was presented showing that up to December 31, 1881, the total receipts were \$13,537,731.34, and total expenditures \$13,377,155.67. The cash on hand was \$160,675.67, and the cash liabilities were \$100,774.12. In December the receipts were \$201,796.54, and the expenditures \$53,926.82.

New stock to the amount of \$70,000 has been issued by the Boston, Revere Beach and Lynn Railroad Company, and taken by the stockholders and a dividend paid upon it, and the road has authority to issue \$80,000 more stock if necessary.

According to the Message of the Mayor the debt of the city of Brooklyn at the close of the year 1881 was \$42,197,000, with a sinking-fund of \$4,022,000. Of the total indebtedness, \$9,236,000 is for Prospect Park, \$10,430,000 for the East River Bridge, \$9,830,000 for the Water Works, \$7,239,000 for temporary debt, \$4,270,000 is in tax certificates. The city is paying \$1,500 a day interest on its bridge debt.

At the annual meeting of the North Pennsylvania Railroad Company on the 9th inst., it was stated that the receipts for the year were \$778,375.15—being dividends and interest on bonds paid by the Philadelphia and Reading Railroad Company.

The following gentlemen have been elected directors of the Mechanics' Banking Association: Trenor W. Park, Thomas W. Evans, Charles J. Osborn, William L. Scott, Frank Work, Cornelius F. Timpson, Joseph G. Mills, John G. McCullough and W. J. Hutchinson. It is intended to increase the stock to \$1,000,000 and to occupy spacious rooms in the new Mills Building. It is also designed to make the bank the nucleus of a stock-clearing house.

The closing quotations on Thursday were: Albany and Susquehanna, 128@131; Adams Express, 147@149; American Express, 92@93½; Chicago, Burlington and Quincy, 136½@136½; Canada Southern, 53½@55; Chicago and Northwestern, 126@126½; do. pref., 138½@139; Chicago, Alton, 132½@133½; Central of New Jersey, 91½@92; Central Pacific, 93½@93½; Chicago, Milwaukee and St. Paul, 108½@109½; do. pref., 121½@121; Cleveland, Columbus, Cincinnati and Indianapolis, 81½@82½; Columbus, Chicago and Indiana Central, 21½@21½; Delaware and Hudson Canal, —@—; Delaware, Lackawanna and Western, 124@124½; Hannibal and St. Joseph, 96@96½; do. pref., 109½@109½; Illinois Central, 132@132½; Lake Erie and Western, 35@35½; Lake Shore and Michigan Southern, 114½@114½; Metropolitan Elevated, 87½@89; Manhattan Elevated, 48½@49; Michigan Central, 88@88; New York Elevated, 105@106½; New York, Lake Erie and Western, 41½@41½; New York Central and Hudson River, 133½@133½; Northern Pacific, 35½@36; do. pref., 74½@74½; Ohio and Mississippi, 37½@37½; Panama, 195@198; Pacific Mail, 41½@41½; Texas and Pacific, 47½@47½; Union Pacific, 117½@117½; United States Express, 76½@77½; Western Union Telegraph, 78½@78½; Wabash, St. Louis and Pacific, 36½@36½; do. pref., 68½@68½; Wells-Fargo Express, 128@130.

The following quotations of sales of Railway and other securities, for the week, are in addition to those given elsewhere in our columns:

New York.—Atlantic and Pacific 1st, 96½; Atchison, Colorado and Pacific 1st, 98; Boston and New York Air Line pref., 63; Chicago and Milwaukee 1st, 118; Cedar Falls and Minnesota, 20; Chicago, St. Louis and New Orleans, 80; do. 1st consol., 115; Chesapeake and Ohio 1st pref., 36; do. 2d pref., 26; do. 1st mort. Series A, 101; do. B, 82; do. cur. int., 51½; Chicago, St. Paul, Minneapolis and Omaha, 35½; do. pref., 99½; do. consol., 98½; Central Iowa, 34; do. 1st, 115½; Chicago, Burlington and Quincy 8s, 103; Chicago, Milwaukee and St. Paul, Chicago and Pacific Western div., 94½; do. S. M. div. 1st, 103½; do. S. W. div. 1st, 103½; Columbus, Chicago and Indiana Central 1st, Trust Co. certif. ass. sup., 118; do. Income, 75; Chicago and Northwestern S. F. 5s, 101½; Chicago, St. Paul and Minneapolis 1st, 108½; Denver and Rio Grande, 68½; do. 1st consol., 103; Des Moines and Ft. Dodge inc., 75½; Denver, South Park and Pacific 1st, 103½; East Tennessee, Virginia and Georgia, 14½; do. pref., 24½; do. inc., 55½; do. 5s, 99; do. 1st, 113½; Galveston, Harrisburg and San Antonio 1st, 103; Green Bay, Winona and St. Peter, 13½; Gulf, Colorado and Santa Fe 1st, 106; Hudson River 2d S. F., 108½; Houston and Texas Central 1st, Western div. 107½; International and Gt. Northern 1st, 107½; do. coup. 6s, 90; Indianapolis, Decatur and Springfield 1st, 105; Indiana, Bloomington and Western, 47; do. 2d, 80; Jackson, Lansing and Saginaw 6s, 110½; Kansas Pacific 1st consol., 103½; do. 6s, Denver div. ass., 108½; Keokuk and Des

Moines 1st, 106; Lehigh and Wilkesbarre consol. ass., 107½; Louisville, New Albany and Chicago, 74; do. 1st, 100½; Long Island, 51½; Lake Erie and Western, 34½; do. 1st, 107½; do. Inc., 54; Louisville and Nashville consol. 6s, 1898, 121½; do. gen'l mort. 6s, 101½; Lafayette, Bloomington and Muncie 1st, 103; Lake Shore dividend bonds, 122; Manhattan Beach, 27½; Minneapolis and St. Louis, 21; do. pref., 61; Mobile and Ohio, 34; do. 1st debent., 96½; do. 2d debent., 68; do. new mort., 110; Missouri, Kansas and Texas, 37; do. consol. 7s, 106½; do. gen'l mort. 6s, 81½; do. 2d, 70½; Missouri Pacific, 100½; do. 3d, 110½; do. 1st consol., 103; Memphis and Charleston, 74; Milwaukee, Lake Shore and Western, 48; do. 1st, 100; Michigan Central 5s, 98; Metropolitan Elevated 2d, 90; New York, Ontario and Western, 27½; Norfolk and Western, 20; do. pref., 58½; do. Gen'l mort., 103; Nashville, Chattanooga and St. Louis, 85; do. 1st, 115½; New Jersey R. R. Transp. Co., 183; New Orleans Pacific 1st, 91½; Northern Pacific 1st, 99½; Ohio Central, 23½; do. inc., 45; do. 1st, 96½; do. 1st Terminal Trust, 95½; Oregon Railway and Nav., 133; do. 1st, 106; Ohio Southern inc., 44; do. 1st, 91½; Ohio and Mississippi Springfield div. 1st, 121½; Peoria, Decatur and Evansville, 35½; do. 1st, 103½; Quincy and Toledo 1st, 102; Rochester and Pittsburg, 25½; do. 1st, 100½; Richmond and Allegany, 36½; do. 1st, 101; Richmond and Danville, 181; do. 6s, 102½; Rome, Watertown and Ogdensburg, 20; Rensselaer and Saratoga 1st, 136; South Pacific of Missouri 1st, 104; St. Louis, Alton and Terre Haute div. bonds, 50; St. Louis and Iron Mountain, Arkansas Branch 1st, 110; do. 5s, 85; St. Paul Minneapolis and Manitoba, 113½; do. 1st, 109; do. 2d, 105½; St. Paul and Duluth pref., 70; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½; do. R. E. 7s, 105; Scioto Valley 1st, 98; St. Paul and Sioux City 1st, 110; Southern Pacific of California 1st, 103½; St. Louis, Jacksonville and Chicago 1st, 116½; Texas Central 1st, 107; Toledo Delphos and Burington, 16½; do. 1st M. L., 84; do. Terminal Trust, 95; Texas and Pacific, 47½; do. inc. L. G., 74; do. Rio Grande div. 6s, 90; Toledo, Peoria and Western 1st, 111; Utah Gen'l mort. 7s, 106; Union Pacific Collateral Trust 6s, 107; Wabash, St. Louis and Pacific, Iowa div. 1st, 90½; do. Gen'l mort. 6s, 88½; do. Chicago div., 85; do. Havana div. 1st, 95; Winona and St. Peter 1st, 107.

Philadelphia.—American Steamship Co. 6s, 107; Catawissa new pref., 53; Central Transportation, 35; Chesapeake and Delaware Canal 6s, 89; Erie and Western Transp. Co., 55; Morris Canal pref., 169; New Orleans Pacific 6s, 92; Nesquehoning Valley, 57½; Philadelphia, Germantown and Norristown, 105; Philadelphia, Wilmington and Baltimore 4s, 94½; Pennsylvania Company 4½s, 95½; Philadelphia and Reading scrip, 81; do. Inc. 7s, 98½; Pennsylvania Canal 6s, 99½; Pittsburg 7s, Water Loan, 127; Schuylkill Nav. Boat Loan 7s, 60; Texas and Pacific consol. mort. 6s, 100; do. Rio Grande div. 6s, 90; Union and Titusville 7s, 103. The latest quotations are: City 6s, —@118; do. free of tax, 126@132; do. 4s, new, 102@109; Pennsylvania State 6s, 3d series, 100@101; do. 5s, new loan, 115@—; do. 4s, new, 107@111; Phil-

adelphia and Reading R. R., 33@33½; do. consol. mort. 7s, reg., 124½@125½; do. mort. 6s, 117@—; do. gen'l mort. 6s, coupon, 97½@98½; do. 7s, 1893, 118@125; do. new, conv., 73@77; United New Jersey R. R. and Canal, 184½@185; Buffalo, Pittsburg and Western, 20½@20½; Pittsburg, Titusville and Buffalo 7s, 102½@102½; Camden and Amboy mort. 6s, 1889, 113½@114; Pennsylvania R. R., 60½@61; do. general mort. reg., 123@—; do. consol. mort. 6s, reg., 119@124; Little Schuylkill R. R. 55½@55½; Morris Canal, 65@75; do. pref., 165@169½; Schuylkill Navigation, 5½@6½; do. pref., 12½@13½; do. 6s, 1882, 88½@89½; do. 1872, 107@108; Elmira and Williamsport pref., 58@60; do. 6s, 110@—; 95@— do. 5s, —; Lehigh Coal and Navigation, 43½@43½; do. 6s, 1884, 105½@106½; do. R. R. loan, 116½@117½; do. Gold Loan, 111½@112½; do. consol. 7s, 114½@117½; Northern Pacific, 35½@36½; do. pref., 75½@75½; North Pennsylvania, 59½@60½; do. 6s, 104½@105½; do. 7s, 123@—; do. General mort. 7s, reg., 119@124; Philadelphia and Erie, 19½@20½; do. 7s, 117@120; do. 5s, 105@105½; Minehill, 60@60½; Catawissa, 14@16; do. pref., 52½@53½; do. new pref., 52½@53½; do. 7s, 1900, 120@—; Lehigh Valley 62@62½; do. 6s, coupon, 120½@121½; do. reg., 121½@122½; do. 2d mort. 7s, 133@—; do. consol. mort. 117½@118½; Fifth and Sixth streets (horse), 149@150; Second and Third, 114½@115½; Thirteenth and Fifteenth, 79½@80½; Spruce and Pine, 47½@48½; Green and Coates, 90@100; Chestnut and Walnut, 94@95; Germantown, —@70; Union, 110@125; West Philadelphia, 111@112; People's 15@15½; Continental, 100@105.

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte 1st, 109½; Baltimore and Ohio 2d pref., 120; Baltimore City 6s, 1890, 114½; do. 6s, 1886, 106½; do. 6s, 1900, 128; do. 5s, 1916, 121½; do. 5s, 1885, 101½; do. 5s, 1894, 116; do. 4s, 1920, 112; Columbia and Greenville 1st, 102½; Canton 6s, gold, 107½; North Carolina 4s, 83; Ohio and Mississippi, Springfield div. 1st, 121½; Richmond and Allegany, 37½; Richmond and Danville 6s, gold, 102½; do. 6s, 1890, 106½; do. 6s, 1885, 103; Virginia Midland 1st pref., 115; do. 2d pref., 115; do. 1st mort., 116½; do. 2d mort., 109½; do. 4th mort., 55; do. 5th mort., 98; Virginia Peelers, 38½; do. Peeler coupons, 32; Virginia Black scrip, 25; Wilmington, Columbia and Augusta, 109. The latest quotations are: Atlanta and Charlotte, 101@—; do. 1st, 109½@109½; Baltimore and Ohio, 195@200; do. 6s, 1885, 106½@107; Baltimore City 6s, 1890, 114@114½; do. 5s, 1885, 101@105; do. 5s, 1894, —@116½; do. 5s, 1916, 121@—; do. 4s, 1920, —@112; Columbia and Greenville 1st, 102½@103½; Central Ohio 1st, 110@111; Marietta and Cincinnati 1st, 125½@125½; do. 2d, 105@106; do. 3d, 61@61½; Northern Central, 48½@—; do. 6s, 1885, 106½@—; do. 6s, gold, 1900, 113@—; do. 5s, 1926, —@97½; Norfolk and Western pref., 57@—; Ohio and Mississippi, Springfield div. 1st, 121½@121½; Pittsburg and Connellsville 7s, 121@121½; Richmond and Danville, 180@195; Virginia Midland 5th, 97@99; Virginia consols., 63½@63½; do. 10-40s, 38½@39.

Boston.—Atlantic and Pacific 6s, 95½; do. Income 6s, 32½; Atchison, Topeka and Santa Fe plain, 5s, 94½; Boston Land, 8½; Boston Water Power, 6½; Burlington and Missouri River in

Nebraska 6s, non-exempt, 103½; Boston, Revere Beach and Lynn, 122; Connotton Valley, 19; do. 7s, 85; do. 7s, Straitsville div., 75; Central of Iowa, 33; Connecticut and Passumpsic Rivers R. R. 7s, 115½; Chicago, Burlington and Quincy 4s, old, 88½; do. 4s, Denver ext., 87½; Cincinnati, Sandusky and Cleveland 7s, 101½; Chicago and West Michigan, 82½; do. 5s, 95½; Detroit, Lansing and Northern pref., 116; do. 7s, 118, Flint and Pere Marquette, 22; do. pref., 93; Fort Scott Branch 7s, 110; Iowa Falls and Sioux City, 84; Kansas City, Lawrence and Southern 5s, 104; Kansas City, Fort Scott and Gulf, 81; do. 7s, 112; Kansas City, St. Joseph and Council Bluffs 7s, 116; Louisiana and Missouri River, 14; do. pref., 35; Little Rock and Fort Smith, 62½; do. 7s, 111; Marquette, Houghton and Ontonagon, 62; do. pref., 116; Massachusetts Central 6s, 93; Mexican Central 7s, 87; do. blocks, new, 93; New York and New England 6s, 107; New Mexico and Southern Pacific 6s, 115½; Northern Pacific 6s, 99½; Portsmouth, Great Falls and Conway 4½s, 86; Quincy Railroad Bridge, 162; Rutland, 5; do. pref., 26; do. 6s, 101; Republican Valley 6s, 103; Sumner and Ft. Smith 7s, 113; Summit Branch, 14; Sonora 7s, 86; Toledo, Delphos and Burlington, 8½; Vermont and Massachusetts 6s, 101; Wisconsin Central, 20½; Wisconsin Valley 7s, 114; Allouez Mining Co., 3½; Atlantic, 18; Brunswick Antimony, 14; Blue Hill, ½; Copper Harbor, 3½; Franklin, 14½; Huron, 3½; Harshaw, 4½; Napa consol. Quicksilver, 7½; National, 3½; Osceola, 35½; Phoenix, 3; Pewabic, 17; Ridge, 4½; Sullivan, 2½; Star, 1; Silver Islet, 20.

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THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY,
TREASURER'S OFFICE, GRAND CENTRAL DEPOT,
NEW YORK, December 23d, 1881.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND OF TWO per cent upon its capital stock, payable on WEDNESDAY, the first day of February next at this office. The transfer books will be closed at 3 o'clock P. M. on Saturday, the 31st instant, and will be reopened on the morning of Saturday, the fourth day of February next.

E. D. WORCESTER, Treasurer.

OFFICE CENTRAL PACIFIC RAILROAD CO.,
SAN FRANCISCO, JUN. 7, 1882.

THREE DOLLARS PER SHARE WILL BE paid on presentation of Dividend Warrant No. 13, on or after February 1st, at this office, or at the office of the Company, No. 9 Nassau street, New York. Transfer books will be closed from 3 P. M., January 14th, to 10 A. M., February 2d, by order of the Board of Directors.

E. H. MILLER, Jr., Secretary.

COTTON-SEED HULLS

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NATIONAL RAILWAY PATENT WASTE CO.

240 Broadway, New York.

FOR SALE.

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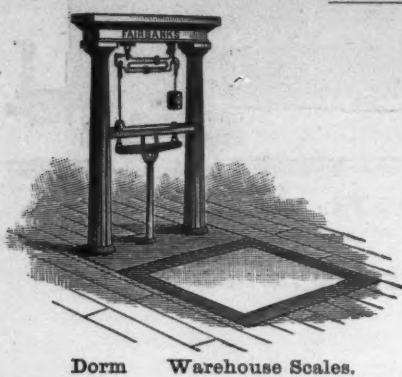
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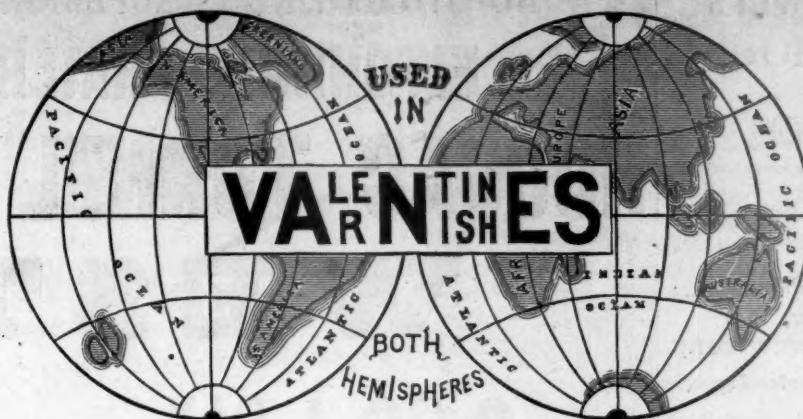
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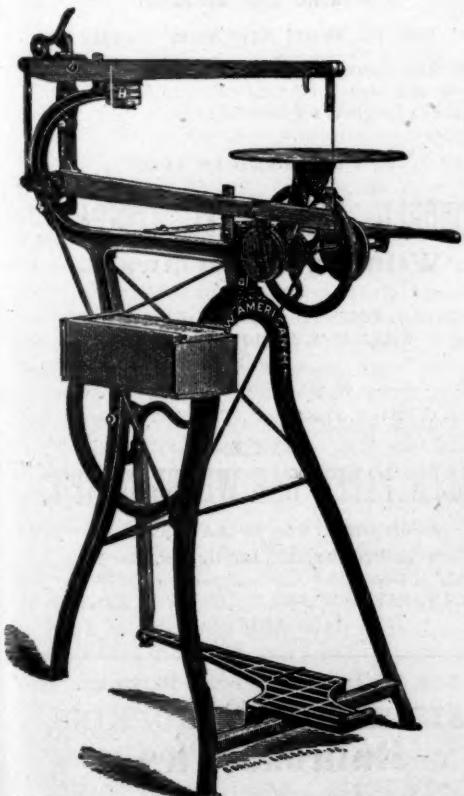
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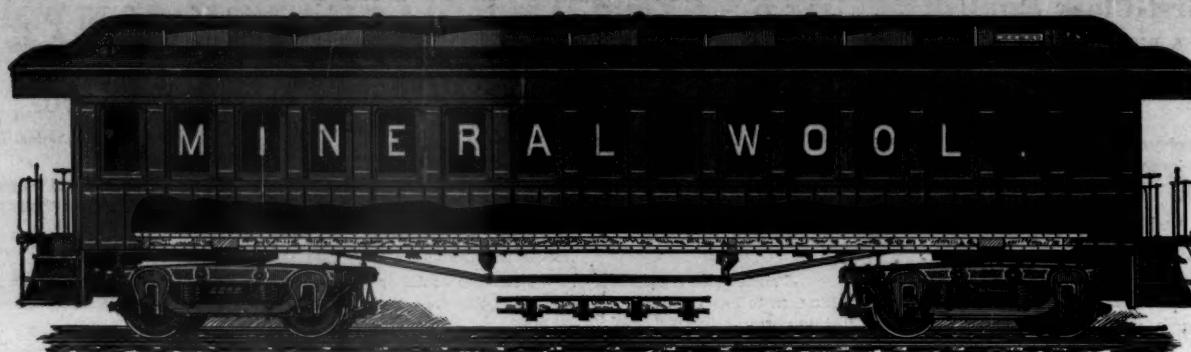
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